

Mining Form MR-500

# S.C. DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL BUREAU OF LAND AND WASTE MANAGEMENT DIVISION OF MINING AND SOLID WASTE PERMITTING 2600 Bull Street, Columbia, SC 29201

Telephone Number: (803) 896-4261 Fax Number: (803) 896-4001

# RECLAMATION PLAN DHEC FORM 500 DATE VERSION ADOPTED 7/1/94

As required in Section 48-20-90 of the South Carolina Mining Act, "An operator shall submit with his application for an operating permit a proposed reclamation plan. The reclamation plan for an operating permit only must be furnished to the local soil and water conservation district in which the mining operation is to be conducted. The plan must include as a minimum each of the elements specified in the definition of 'reclamation plan' in Section 48-20-40 and information required by the department. The reclamation plan must provide that reclamation activities, particularly those relating to control of erosion, to the extent feasible, must be conducted simultaneously with mining operations and be initiated at the earliest practicable time after completion or termination of mining on a segment of the permitted land. The plan must provide that reclamation activities must be completed within two years after completion or termination of mining on each segment of the area for which an operation permit is requested unless a longer period specifically is permitted by the department."

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I. APPLICANT INFORMATIO
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1.	Name of Company: Rea Contracting, LL	ıC	NOV 0 7 2008	
2.	Name of Proposed Mine: Sand Pit 132 Fi	shing Creek DN	VISION OF MINING ATTY.	Chester
3.	Home Office Address: 8205 Wilkinson Bl		BL&WM	(704) 394-8354
	(Street <u>and</u> P.O. Box) <b>Charlotte</b>	NC		(Telephone No.) (704) 394 - 5354
4.	(City) Local Office Address: same as Item 3	(State)	(Zip Code)	(Fax No.)
\lnot.	(Street and P.O. Box)			(Telephone No.)
	(City)	(State)	(Zip Code)	(Fax No.)
	Name of company personnel and their title to be and correspondence: Robbie L Robinson-			
6.	Location of Mine: County Hwy No. S-12-	77	Great F	alls
	State or County Hwy No.		Nearest To	own or City

#### II. ENVIRONMENTAL PROTECTION

- 1. Describe practices to protect adjacent resources such as roads, wildlife areas, woodland, cropland and others during mining and reclamation.
  - Access will be limited by a locked gate at the mine entrance and screened from public view by the existing wooded areas. Mining will occur in the stream channel along approximately 1050 linear feet of the stream channel. Excavation in the stream channel will provide deeper pools for aquatic life and once mining is completed will be filled over time by the natural deposits of sediment in the stream.
- 2. Describe proposed methods to limit significant adverse effects on adjacent surface water and groundwater resources. Stockpile areas will be provided to collect the sand from the dragline. The excavation slope will be the natural angle of repose of the sand and gravel or 3:1 (H:V) slope which ever is the flattest slope Sediment basins will be constructed downslope of the collection areas. The stock piles will consist of wet sand with little potential for loss by wind erosion.
- 3. Describe proposed methods to limit significant adverse effects on known significant cultural or historic sites within the proposed permitted area.
  - No known significant cultural or historic sites are within the proposed permitted area.

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- 4. Describe method to prevent or eliminate conditions that could be hazardous to animal or fish life in or adjacent to the permitted area.
  - Little to no impact to aquatic life or wildlife in the stream or in the immediate area of the stream is anticipated. No disturbance of the stream bank will occur except for minimal disturbance for dragline access and location of the stockpile areas. Excavation in the stream channel will provide deeper pools for aquatic life and once mining is completed will be filled over time by the natural deposits of sediment in the stream.
- 5. Describe how applicant will comply with State air quality and water quality standards as established by the S.C. Department of Health and Environmental Control.

Rea Contracting, LLC will install and maintain proposed Sediment and Erosion Control measures to maintain water quality standards. Measures to maintain dust from haul roads will be implemented to maintain air quality standards. Mining activities at the site will be conducted in a manner consistent with protecting and maintaining air and water quality standards of the SCDHEC.

#### III.

RE	CLAMATION OF AFFECTED AREA				
	State useful purpose(s) the affected land is being proposed information should be submitted to support the feasibility fo				
á	a. Lake or pond	f. Grassland			
t	o. Agriculture	g. Recreation			
c	c. Woodlands	h. Wetlands			
c	d. Residential	. Park			
e	e. Commercial	. Other			
5	7. State the final maximum surface gradient(s) (slope) in soil, sand, or other unconsolidated materials on reclaimed land. Surface gradients steeper than 3H:1V (18 degrees or 33 percent) may be required to submit geotechnical data and studies to demonstrate that the steeper slopes will remain stable following final reclamation.  The reclaimed area will be graded back to pre-existing conditions prior to mining activities. No slopes will be graded steeper than 3H:1V.				
t c k	8. How will the final slopes in unconsolidated material be accomplished? If the slope will be by backfilling, demonstrate that there is adequate material to accomplish the stated final gradient. If gradient is to be achieved by bringing in material from outside the permitted area, state the nature of the material and approximate quantities. If the gradient is to be achieve by grading, show that there is adequate area for grading to achieve gradient (i.e., adequate distance between the proper line and edge of highwall). Operator should show calculations or other appropriate information to demonstrate that there is adequate materials in backfilling and grading to meet the requirements for final slope.				
7	Backfilling with material from within the material from within the material from within the material material conditions will be hauled in from an off-site source of channel will be filled over time by the naterial concemining activities are completed.	prior to mining activities. No material r location. Excavation in the stream			
r		of affected area(s). The revegetation plan shall include but eparation and fertilization; (c) seed or plant selection; (d) rate			

fro ex di	ovide, as a separate document, a closure plan of the mine and permitted facilities to prevent a release of contaminants om being harmful to the environment. A closure plan is not necessary for all mines, but is required where the possibility cists for (a) acid rock drainage; (b) where the National Pollutant Discharge Elimination Systems (NPDES) Permit has escharge limitation parameters other than pH and Total Suspended Solids (TSS); (c) chemically treated tailings or ockpiles (excludes fertilizer or lime for revegetation purposes).
N	ot applicable.

11. Method of control of contaminants and disposal of mine waste soil, rock, mineral, scrap, tailings, slimes, and other material directly connected with the mining, cleaning, and preparation of mineral substances mined and includes all waste materials deposited on or in the permit area from any source.

No mine waste material will be deposited on or in the Mine Permit Area.

12. Method of reclaiming settling and/or sediment ponds.

Sediment Basins 1 and 2 will be reclaimed by backfilling with material from the mine permit area. The area will be graded to pre-existing conditions prior to mining activities. Once backfilling is completed the area will be revegetated according to the Vegetation Plan.

13. Describe method of restoration or establishment of stream channels, stream banks and site drainage to a condition minimizing erosion, siltation and other pollution.

All stream channels, stream banks, and drainage in the mine permit area will be restored to pre-existing conditions prior to mining activities. Minimal impact to the stream banks is anticipated during mining activities. Excavation in the stream channel will provide deeper pools for aquatic life and once mining is completed will be filled by the natural deposits of sediment in the stream.

14. What are the maintenance plans to insure that the reclamation practices established on the affected land will not deteriorate before released by the Department?

A Mine Maintenance Plan has been established and is provided on the Mine Detail Sheet-Sheet 2.

15. For final reclamation, submit information about practices to provide for safety to persons and to adjoining property in all excavations. Identify areas of potential danger (vertical walls, unstable slopes, unstable surface on clay slimes, etc.) and provide appropriate safety provisions. These provisions can include but are not limited to setbacks, fencing,

Minimal potential for danger to persons or to adjoining properties will exist for excavations in the mine area. Excavation will only occur in the stream channel along approximately 1050 linear ft. of the stream. Once mining is completed the channel will be filled by the natural deposits of sediment in the stream.

16. What provisions will be taken to prevent noxious, odious, or foul pools of water from collecting and remaining on the mined area? For mines to be reclaimed as lakes or ponds, provide supporting information that a minimum water depth of four (4) feet on at least fifty percent (50%) of the pond surface area can be maintained.

The mine area will be re-graded and re-vegetated to the pre-existing conditions prior to mining activities.

17. Identify any structures (e.g. buildings, roads) that are proposed to remain as part of final reclamation. Provide justification for leaving any structures.

No structures are proposed or will remain in place in the mine permit area.

- 18. Attach two (2) copies of a map of the area (referred to as the RECLAMATION MAP) that shows the reclamation practices and conservation practices to be implemented. The following should be shown:
  - A. The outline of the proposed final limits of the excavation during the number of years for which the permit is requested.
  - B. The approximate final surface gradient(s) and contour(s) of the area to be reclaimed. This would include the sides and bottoms of mines reclaimed ponds and lakes.
  - C. The outline of the tailings disposal area.
  - D. The outline of disposal areas for spoil and refuse (exclusive of tailings ponds).
  - E. The approximate location of the mean shore line of any impoundment or water body and inlet and/or outlet structures which will remain upon final reclamation.
  - F. The approximate locations of access roads, haul roads, ramps or buildings which will remain upon final reclamation.
  - G. The approximate locations of various vegetative treatments.
  - H. The proposed locations of re-established streams, ditches or drainage channels to provide for site drainage.
  - 1. The proposed locations of diversions, terraces, silt fences, brush barriers or other Best Management Practices to be used for preventing or controlling erosion and off-site siltation.
  - J. Proposed locations of the measures to provide safety to persons and adjoining property.
  - K. Segments of the mine that can be mined and reclaimed as an ongoing basis.
  - L. The boundaries of the permitted area.
  - M. The boundaries of the affected area for the anticipated life of the mine.
  - N. The boundaries of the 100-year floodplain, where appropriate.
  - O. Identify sections of mine where the final surface gradient will be achieved by grading and/or backfilling.
  - P. A legend showing the name of the applicant, the name of the proposed mine, the north arrow, the county, the scale, the date of preparation and the name and title of the person who prepared the map.

THE REQUIRED RECLAMATION MAP SHALL HAVE A NEAT, LEGIBLE APPEARANCE AND BE OF SUFFICIENT SCALE TO CLEARLY SHOW THE REQUIRED INFORMATION LISTED ABOVE. THE BASE FOR THE MAP SHALL BE EITHER A SPECIALLY PREPARED LINE DRAWING, AERIAL PHOTOGRAPH, ENLARGED USGS TOPOGRAPHIC MAP OR A RECENTLY PREPARED PLAT. RECLAMATION MAP SHOULD BE THE SAME SCALE USED FOR THE SITE MAP.

### IV. SCHEDULE FOR IMPLEMENTATION OF CONSERVATION AND RECLAMATION PRACTICES

19. As stated in Section 48-20-90 of the S.C. Mining Act, reclamation activities, to the extent feasible, must be conducted simultaneously with mining operations. Identify which areas or segments of the mine are not feasible to reclaim simultaneously with mining. Provide reasons why reclamation can not proceed simultaneously with mining in these areas.
Mine reclamation will not be feasible until mining is completed.

Reclamation will involve regrading to pre-existing conditions and would not be possible during active mining. Excavation in the stream channel will be filled over time by the natural deposits of sediment in the stream.

20. Section 48-20-40(16)(I) of the S.C. Mining Act requires a "time schedule, including the anticipated years for completion of reclamation by segments." This time schedule should meet the requirements of Section 48-20-90 of the Mining Act.

## SCHEDULE FOR IMPLEMENTING CONSERVATION AND RECLAMATION PRACTICES

Conservation & Reclamation	Segment # or	Planned		*Applied		Notes
Practices	Area	Amount	Year	Amount	Month/Year	Notes
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YOU ARE NOTIFIED THAT:		
You, the operator, must file an application to forth hereinabove; and	modify the reclamation plan in the	e event actual reclamation varies from the set
		nation plan are failing to achieve the purposes CLAMATION PLAN in accordance to Section
Signature of Applicant/Operator or his Authorized	d Representative	
Robbie L. Robinson Printed Name of Applicant/Operator or his Autho	rized Representative	
OC Manager Title		
10-20-08 Date		
Department Use Only	<del></del>	
Permit No.: Date Application Approve		
Bond Amount: Blanket or Sin	ngle Bond: Permit	t Issuance Date:
ACTION TAKEN ON THIS RECLAMATION PLAN	N	
ApprovedDenied	Approved with Additional T	erms and Conditions
By: DIVISION DIRECTOR		
Date:		
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